NASA INFORMATION SYSTEMS
SCIENCE INFORMATION SYSTEMS NEWSLETTER

Feature

LinkWinds Version 2.2 Now Available

A new version of LinkWinds, a visual data analysis and exploration system and winner of NASA's 1996 Software of the Year award, was recently released. Linkwinds is a powerful viewer for scientific examination of geophysical and climatalogical data retrieved from satellite remote sensing. LinkWinds 2.2 applies a unique data-linking paradigm resulting in a system that functions much like a graphical spreadsheet.

New features

Version 2.2 provides a highly intuitive, easy-to-learn, easy-to-retain user interface on top of the traditional graphical user interface. The linking of data displays and controls for their manipulation provides flexibility in rapidly exploring large masses of complex data to quickly detect trends, correlations and anomalies. The system is comprised of a large and expanding suite of non-domain specific applications and provides for the ingestion of a variety of database formats. Its many functions and services include

- 2D and 3D graphical displays of data
- ability to deal with very large data files
- supersetting to construct higher dimen - sionality data sets from sets of data files (useful for building time series from daily data accumulations)
- simultaneous display and analysis of multiple data sets which may be totally unre lated
- unique and easy-to-use animation creation and display capability
- interactive color manipulation
- journal and macro capability allowing replay of an entire session or any portion thereof
- hard copy of graphical displays and text
- context-sensitive help
- network support for collaborative data analysis with partners anywhere on the internet, using virtually no bandwidth
- archived data sets
- ability to ingest and display real time data, which may be from spacecraft, laboratory experiments, or computer simulations

New capabilities

The new version, 16 months in the making, has many new capabilities including the ability to run on Sun, Hewlett Packard, and Linux (PC) platforms in addition to the Silicon Graphics, Inc. family for which it was originally developed. Several new tools have been implemented including ValueView, (displays numerical values) VolumeView, (displays a volumetric

rendering), enhanced hard copy capabilities and PointInterp which will draw an image from non-uniform sparse data such as that in the Upper Atmosphere Research (UARS) Satellite Level 3 AT files. In addition to UARS files, LinkWinds can accept data in the following format

- raw binary data in signed and unsigned 1, 2, and 4 byte integers, and 4 and 8 byte floating point
- hierarchical data format (HDF)
- common data format (CDF)
- NetCDF
- SGI native RGB image format
- data with Planetary Data Systemheaders
- astrophysics flexible image transport system
- ASCII text data
- Stratospheric Aerosol and Gas Experiment data format

LinkWinds can act as an application spawned by Netscape or another Web browser. Thus, for example, you can download HDF files from the EOSDAACs and have them appear in LinkWinds as data objects. Collaborative sessions or tutorials with anyone on the Internet are easily carried out using a low-bandwidth protocol.

For further information email the LinkWinds team or access the LinkWinds Web site, respectively, at:

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